

**FIG. 1**

30

32

35

CONCEPTUAL  
KNOWLEDGE  
DATABASE UNIT  
(SEMANTIC  
INFORMATION)

WEB SUMMARY  
KNOWLEDGE  
DATABASE

GRAMMAR MODELS  
DATABASE UNIT  
(SYNTACTIC  
INFORMATION)

USER PROFILE  
DATABASE

PROBABILITY  
ADJUSTMENT UNIT

APPLICATION  
DOMAIN  
DESCRIPTION  
DATABASE

PHONETIC  
UNIT

DIALOGUE  
CONTROL  
UNIT

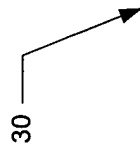
DYNAMIC  
ADJUSTMENT UNIT

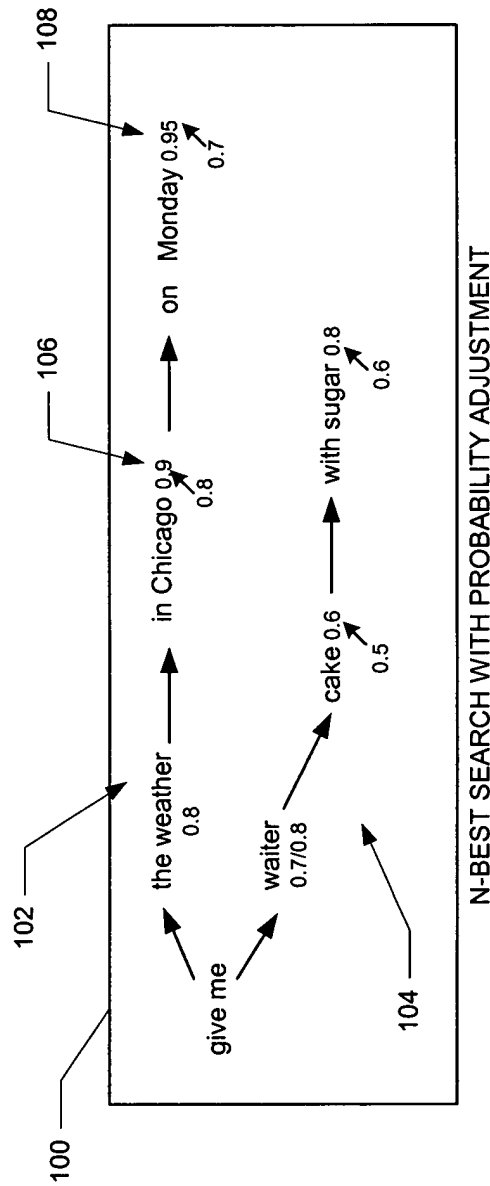
LANGUAGE MODEL  
ADJUSTED OUTPUT  
UNIT

LANGUAGE MODELS

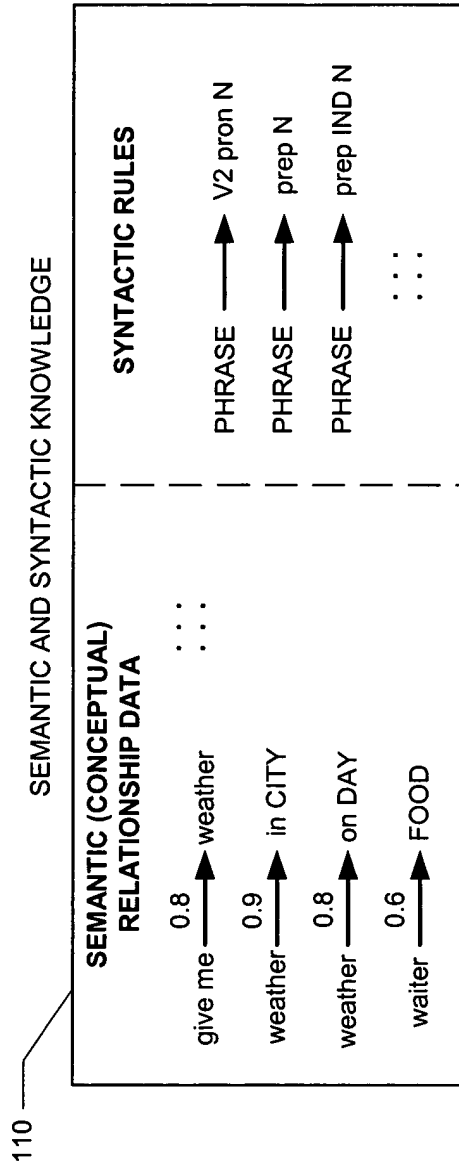
RECOGNITION  
PROBABILITIES

USER INPUT  
SPEECH



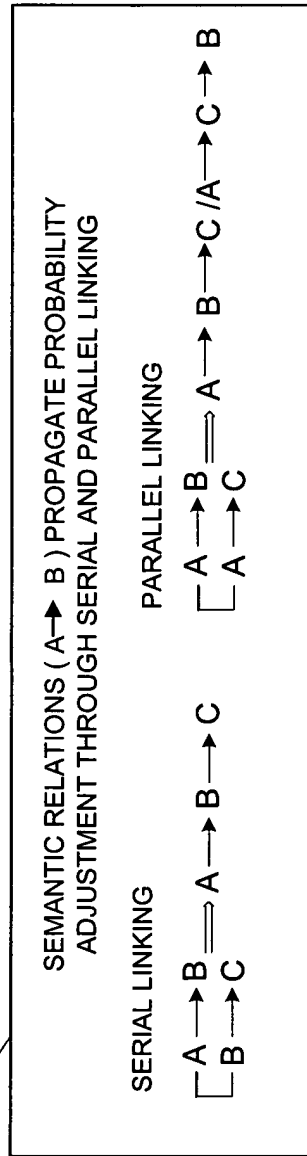


**FIG. 2**



**FIG. 3**

120




PROBABILITY PROPAGATION

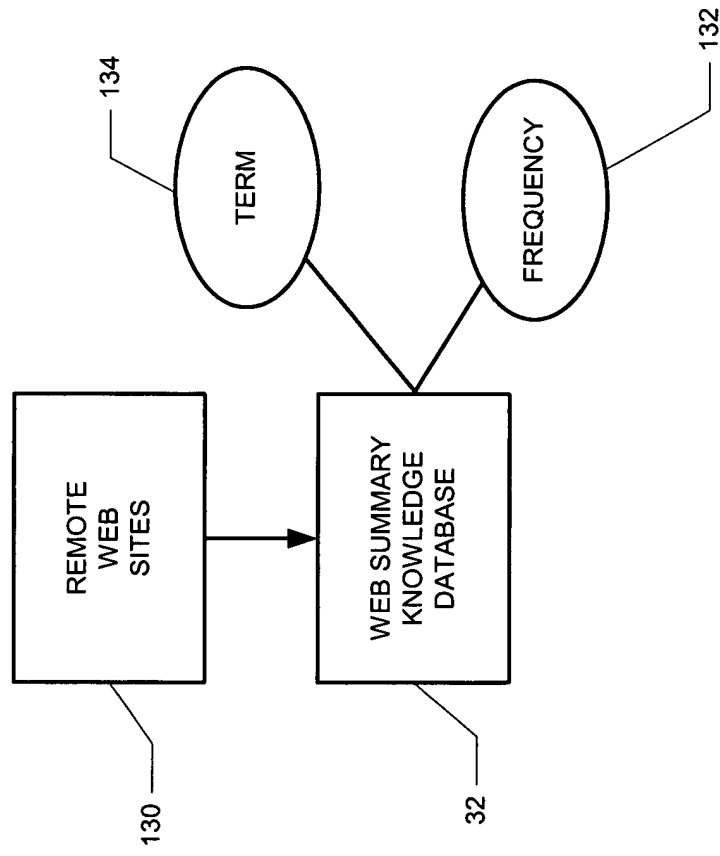
**FIG. 4**

**FIG. 5**

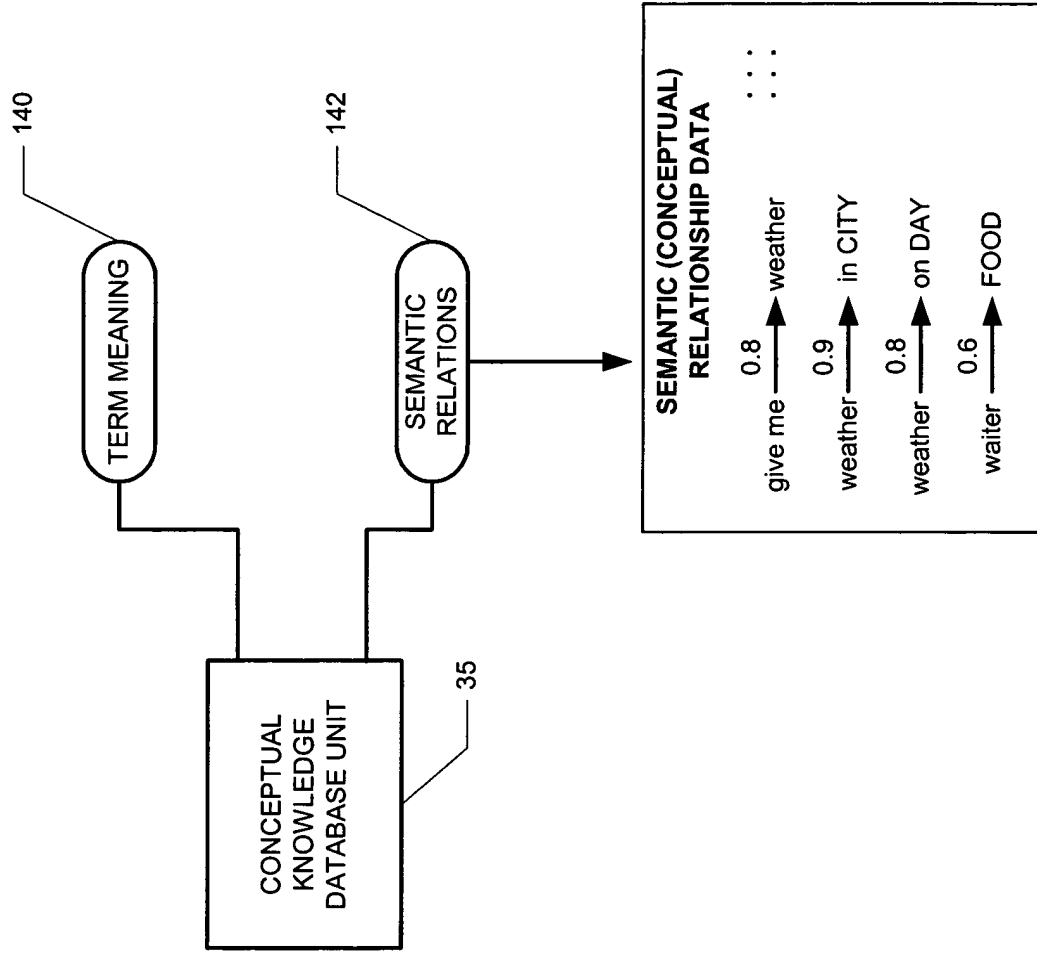
36



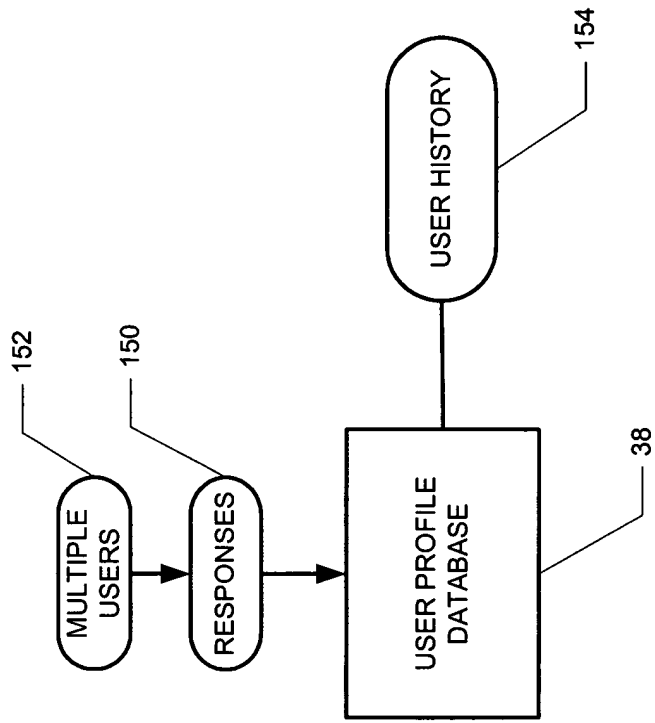
		WORDS			
		REFILL-INK	OUTDOOR	OFFENSE	OUTPUT
DOMAINS	ENTERTAINMENT	L	H	L	L
	COMPUTER PRINTERS	H	L	L	H
	LAW	L	L	H	L
	WEATHER	L	H	L	L



**FIG. 6**

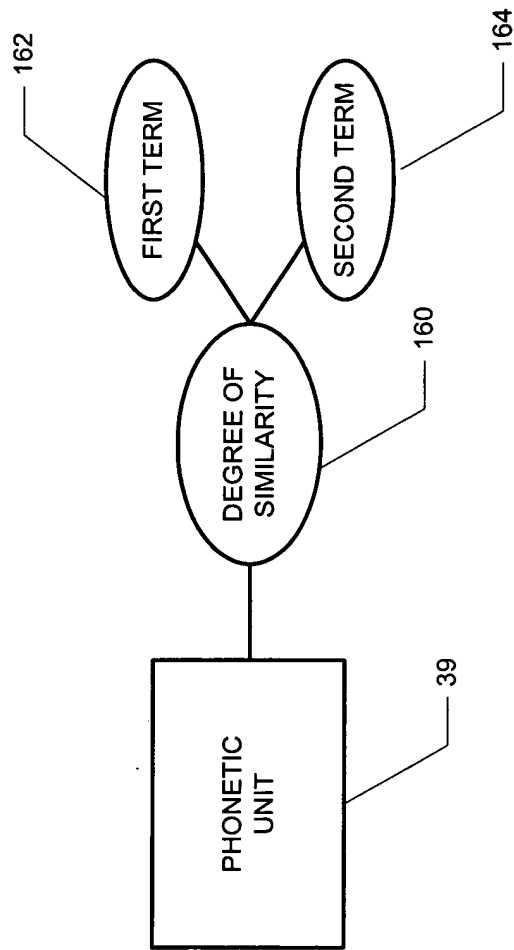


**FIG. 7**



**FIG. 8**





**FIG. 9**